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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|-------------------------|----------------------|------------------------------|------------------|
| 10/075,954 02/13/2002 | | Charles Andrianjara | A0000476-01-CFP | 9823 |
| 28880 | 7590 12/03/2004 | | EXAMINER TRUONG, TAMTHOM NGO | |
| | LAMBERT COMPANY | • | | |
| 2800 PLYMO ANN ARBO | OUTH RD R', MI 48105 | | ART UNIT | PAPER NUMBER |
| , | | | 1624 | |

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|--|--|--|------------------------------------|--|--|--|
| | | 10/075,954 | ANDRIANJARA ET AL. | | | |
| | Office Action Summary | Examiner | Art Unit | | | |
| | • | Tamthom N. Truong | 1624 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) | 1) Responsive to communication(s) filed on 13 September 2004. | | | | | |
| ,— | | action is non-final. | | | | |
| 3)□ | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1,3,4,8,9,11-16,28,29 and 37-39 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) 1, 3, 4, 8, 9, 11-16, 28, 29, and 37-39 are subject to restriction and/or election requirement. | | | | | | |
| Applicati | on Papers | , | | | | |
| 9)[| 9) The specification is objected to by the Examiner. | | | | | |
| 10) | 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11) | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority u | inder 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachmen | t(s) | | | | | |
| 1) Notic | e of References Cited (PTO-892) | 4) Interview Summary | | | | |
| 3) Inform | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date | Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other: | ite atent Application (PTO-152) | | | |

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DETAILED ACTION

Applicant's amendment of 9-13-04 has been fully considered. The amended claims have overcome the previous "Use Claims" rejection by canceling the rejected claims 32-34. The amended claim 39 also has overcome the previous objection. However, the complicated combination of variables necessitates the following restriction.

Claims 2, 5-7, 10, 17-27, 30, and 36 are cancelled.

Claims 1, 3, 4, 8, 9, 11-16, 28, 29, and 37-39 are pending.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula
 (I) with the following substituents:

 R_1 is hydrogen atom;

R₃ is hydrogen atom;

A is monocycle;

Pharmaceutical composition thereof as well as method of treatment using said compound; classified in classes 514 and 544, various subclasses depending on substituents.

2. Claims 1, 3, 8, 9, 11-13, 15, 16, 28, and 37-39 (part of each), drawn to compounds of formula (I) with the following substituents:

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R₁ is an acyclic group (e.g., amino, alkyl, alkenyl, alkynyl, etc.) or a group not containing a ring;

R₃ is hydrogen atom;

A is monocycle;

Pharmaceutical composition and process of making thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

3. Claims 1, 3, 8, 9, 11-13, 15, 16, and 37-39 (part of each), drawn to compounds of formula (I) with the following substituents:

 R_1 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.) or a group containing a ring;

R₃ is hydrogen atom;

A is monocycle;

Pharmaceutical composition thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

4. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula(I) with the following substituents:

R₁ is hydrogen atom;

R₃ is an acyclic group (e.g., alkyl, alkenyl, or alkynyl, etc.), or a group not containing a ring;

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A is monocycle;

Pharmaceutical composition thereof as well as method of treatment using said compound; classified in classes 514 and 544, various subclasses depending on substituents.

5. Claims 1, 3, 8, 9, 11-13, 15, 16, 28, and 37-39 (part of each), drawn to compounds of formula (I) with the following substituents:

 R_1 is an acyclic group (e.g., amino, alkyl, alkenyl, alkynyl, etc.) or a group not containing a ring;

R₃ is an acyclic group (e.g., alkyl, alkenyl, or alkynyl, etc.), or a group not containing a ring;

A is monocycle;

Pharmaceutical composition and process of making thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

6. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

 R_1 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.) or a group containing a ring;

R₃ is an acyclic group (e.g., alkyl, alkenyl, or alkynyl, etc.), or a group not containing a ring;

A is monocycle;

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Pharmaceutical composition thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

7. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

R₁ is hydrogen atom;

 R_3 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.), but **not** the formula having ring B;

A is monocycle;

Pharmaceutical composition thereof as well as method of treatment using said compound; classified in classes 514 and 544, various subclasses depending on substituents.

8. Claims 1, 3, 8, 9, 11-13, 15, 16, 28, and 37-39 (part of each), drawn to compounds of formula (I) with the following substituents:

 R_1 is an acyclic group (e.g., amino, alkyl, alkenyl, alkynyl, etc.) or a group not containing a ring;

 R_3 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.), but **not** the formula having ring B;

A is monocycle;

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Pharmaceutical composition and process of making thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

9. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

 R_1 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.) or a group containing a ring;

 R_3 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.), but **not** the formula having ring B;

A is monocycle;

Pharmaceutical composition thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

10. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

 R_1 is hydrogen atom;

 R_3 is the formula of $(R_5)_q$ -(ring B)- $(Z_2)_p$ -;

A is monocycle;

Pharmaceutical composition thereof as well as method of treatment using said compound; classified in classes 514 and 544, various subclasses depending on substituents.

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11. Claims 1, 3, 8, 9, 11-13, 28, and 37-39 (part of each), drawn to compounds of formula (I) with the following substituents:

R₁ is an acyclic group (e.g., amino, alkyl, alkenyl, alkynyl, etc.) or a group not containing a ring;

 R_3 is the formula of $(R_5)_q$ -(ring B)- $(Z_2)_p$ -;

A is monocycle;

Pharmaceutical composition and process of making thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

12. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula (I) with the following substituents:

 R_1 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.) or a group containing a ring;

 R_3 is the formula of $(R_5)_{q}$ -(ring B)- $(Z_2)_{p}$ -;

A is monocycle;

Pharmaceutical composition thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

13. Claims 1, 3, 8, 9, 11-13, and 37-39, drawn to compounds of formula (I) with the following substituents:

R₁ is hydrogen atom;

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R₃ is hydrogen atom;

A is bicycle;

Pharmaceutical composition thereof as well as method of treatment using said compound; classified in classes 514 and 544, various subclasses depending on substituents.

14. Claims 1, 3, 8, 9, 11-13, 28, and 37-39 (part of each), drawn to compounds of formula (I) with the following substituents:

R₁ is an acyclic group (e.g., amino, alkyl, alkenyl, alkynyl, etc.) or a group not containing a ring;

R₃ is hydrogen atom;

A is bicycle;

Pharmaceutical composition and process of making thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

15. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

 R_1 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.) or a group containing a ring;

R₃ is hydrogen atom;

Pharmaceutical composition thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

16. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

R₁ is hydrogen atom;

R₃ is an acyclic group (e.g., alkyl, alkenyl, or alkynyl, etc.), or a group not containing a ring;

A is bicycle;

Pharmaceutical composition thereof as well as method of treatment using said compound; classified in classes 514 and 544, various subclasses depending on substituents.

17. Claims 1, 3, 8, 9, 11-13, 28, and 37-39 (part of each), drawn to compounds of formula (I) with the following substituents:

R₁ is an acyclic group (e.g., amino, alkyl, alkenyl, alkynyl, etc.) or a group not containing a ring;

R₃ is an acyclic group (e.g., alkyl, alkenyl, or alkynyl, etc.), or a group not containing a ring;

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Pharmaceutical composition and process of making thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

18. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

 R_1 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.) or a group containing a ring;

R₃ is an acyclic group (e.g., alkyl, alkenyl, or alkynyl, etc.), or a group not containing a ring;

A is bicycle;

Pharmaceutical composition thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

19. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

R₁ is hydrogen atom;

 R_3 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.), but **not** the formula having ring B;

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Pharmaceutical composition thereof as well as method of treatment using said compound; classified in classes 514 and 544, various subclasses depending on substituents.

20. Claims 1, 3, 8, 9, 11-13, 28, and 37-39 (part of each), drawn to compounds of formula (I) with the following substituents:

 R_1 is an acyclic group (e.g., amino, alkyl, alkenyl, alkynyl, etc.) or a group not containing a ring;

 R_3 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.), but **not** the formula having ring B;

A is bicycle;

Pharmaceutical composition and process of making thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

21. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

 R_1 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.) or a group containing a ring;

 R_3 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.), but **not** the formula having ring B;

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Pharmaceutical composition thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

22. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

R₁ is hydrogen atom;

 R_3 is the formula of $(R_5)_q$ -(ring B)- $(Z_2)_p$ -;

A is bicycle;

Pharmaceutical composition thereof as well as method of treatment using said compound; classified in classes 514 and 544, various subclasses depending on substituents.

23. Claims 1, 3, 8, 9, 11-13, 28, and 37-39 (part of each), drawn to compounds of formula (I) with the following substituents:

 R_1 is an acyclic group (e.g., amino, alkyl, alkenyl, alkynyl, etc.) or a group not containing a ring;

 R_3 is the formula of $(R_5)_q$ -(ring B)- $(Z_2)_p$ -;

A is bicycle;

Pharmaceutical composition and process of making thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

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24. Claims 1, 3, 8, 9, 11-13, and 37-39 (part of each), drawn to compounds of formula

(I) with the following substituents:

 R_1 is a cyclic group (e.g., cycloalkyl, aryl, aryl(C_1 - C_6)alkyl, etc.) or a group containing a ring;

 R_3 is the formula of $(R_5)_q$ -(ring B)- $(Z_2)_p$ -;

A is bicycle;

Pharmaceutical composition thereof as well as method of treatment using said compounds; classified in classes 514 and 544, various subclasses depending on substituents.

The inventions are distinct, each from the other because of the following reasons:

- A. Inventions groups 1 to 24 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP \S 806.04, MPEP \S 808.01). In the instant case the different inventions are set apart by the combination of R_1 , R_3 and ring A.
- B. As evident by the multiple pages of IDS submitted on 9-13-04, the core of *pyrido-pyrimidine* is well known in the art. Clearly, said core alone cannot sufficiently define the invention, and is not a contribution to the art. Thus, it is the combination of the core with variables R₁, R₃ and ring A that gives distinct physical, chemical properties as well as biological activity for the compounds in each group. Therefore, a prior art reading on the compounds of one group would not do so to the compounds of the other groups.

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C. Note, ring B (in R₃) comprises rings or ring systems which further differentiate compounds of formula (I) from those having simpler substituents such as hydrogen, alkyl, alkenyl, etc. Thus, a separate search is required.

Because the inventions are distinct for the reasons given above and require separate searches, and to search the 24 inventions would indeed impose a serious burden upon the examiner in charge of this invention, restriction for examination purposes as indicated is proper.

Due to the complexity of the grouping, the restriction is presented in writing

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamthom N. Truong whose telephone number is 571-272-0676. The examiner can normally be reached on M-F (10:00-6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Tamthom N. Truong Examiner Art Unit 1624

11-23-04

JAMES O. WILSON

SUPERVISORY PATENT EXAMINER